# **Shut-off valves**

Outstanding value!

## Needle shut-off valves with bulkhead threads for panel mounting

Materials: Housing: Brass nickel-plated, seal: NBR

Temperature range:  $-10^{\circ}\text{C}$  to max.  $+80^{\circ}\text{C}$ Switch panel mounting: For borehole diameter  $\varnothing$  14.5 mm

Туре	Thread	DN	L	Н	E <sub>max</sub>	
NADEL 18 MSV	G 1/8"	4	51.6	64	3	
NADEL 14 MSV	G 1/4"	4	57.0	64	3	
NADEL 38 MSV	G 3/8"	8	63.0	90	10	
NADEL 12 MSV	G 1/2"	8	69.0	90	10	

#### Stainless steel needle shut-off valves

★★★★★ Eco-Line PN 300

Materials: Housing AISI 316, handle: AISI 304, seal: PTFE (on the spindle) Temperature range: -20°C to max. +200°C

Thread	DN	L	Н	KV value*
G 1/8"	2.5	48	77	8.0 l/min
G 1/4"	3.5	56	80	11.5 l/min
G 3/8"	3.5	56	80	13.5 l/min
G 1/2"	4.8	66	89	18.0 l/min
G 3/4"	6.4	66	93	21.0 l/min
G 1"	9.5	80	108	24.0 l/min
	G 1/8" G 1/4" G 3/8" G 1/2" G 3/4"	G 1/8" 2.5 G 1/4" 3.5 G 3/8" 3.5 G 1/2" 4.8 G 3/4" 6.4	G 1/8" 2.5 48 G 1/4" 3.5 56 G 3/8" 3.5 56 G 1/2" 4.8 66 G 3/4" 6.4 66	G 1/8" 2.5 48 77 G 1/4" 3.5 56 80 G 3/8" 3.5 56 80 G 1/2" 4.8 66 89 G 3/4" 6.4 66 93

air flow [l/min]  $\approx 13.4 \cdot \text{Ky} \cdot \text{Pinput}$ , if Poutput  $< \frac{P_{input}}{2}$  (Pinput and Poutput are absolute values in bar.)

### **Needle shut-off valves with hand wheels**

Materials: Housing: Zinc-pl. steel or stainl. steel AISI 316Ti, seal: Graphite (type AISI 316Ti: PTFE), hand wheel: Pressed

Temperature range: -30°C to max. +350°C (type AISI 316Ti: -30°C to max. +250°C)



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	Туре	Type						
7	zinc-plated steel	AISI 316Ti		Thread	DN	L	KV value*	PN
	NADEL 18 HR	NADEL 18 HR ES		G 1/8"	4	45	4 l/min	400 bar
	NADEL 14 HR	NADEL 14 HR ES		G 1/4"	5	55	8 l/min	400 bar
	NADEL 38 HR	NADEL 38 HR ES		G 3/8"	6	55	10 l/min	400 bar
	NADEL 12 HR	NADEL 12 HR ES		G 1/2"	7	60	12 l/min	400 bar
	NADEL 34 HR	NADEL 34 HR ES		G 3/4"	9	75	18 l/min	200 bar
	NADEL 10 HR	NADEL 10 HR ES		G 1"	12	100	32 l/min	200 bar
	NADEL 114 HR	NADEL 114 HR ES		G 1 1/4"	15	110	60 l/min	160 bar
	NADEL 112 HR	NADEL 112 HR ES		G 1 1/2"	22	130	115 l/min	120 bar
	NADEL 20 HR	NADEL 20 HR ES		G 2"	22	130	130 l/min	120 bar

water flow rate at  $+20^{\circ}$ C, 1 bar pressure at the valve inlet, free discharge. air flow [l/min]  $\approx 13.4 \cdot \text{K}_{V} \cdot \text{Pinput}$ , if  $\text{Poutput} < \frac{P_{input}}{2}$  (Pinput and Poutput are absolute values in bar.)

#### **Needle shut-off valves**

up to 100 bar

Materials: Housing: Brass, seal: NBR (3/4"- 2": PTFE)

Temperature range: -30°C to max. +110°C (G 1/8": -10°C to max. +60°C)

Type FT/FT	Type MT/MT	Thread	DN	L	KV value*	PN
NADEL 18		G 1/8"	4	36		15 bar
NADEL 14	NADEL 14 A	G 1/4"	4	42		40 bar
NADEL 38	NADEL 38 A	G 3/8"	7	50		40 bar
NADEL 12		G 1/2"	11	64		40 bar
NADEL 34		G 3/4"	9	67	18 l/min	100 bar
NADEL 10		G 1"	11	75	28 l/min	100 bar
NADEL 114		G 1 1/4"	13	110	42 l/min	100 bar
NADEL 112		G 1 1/2"	15	110	60 l/min	100 bar
NADEL 20		G 2"	15	110	60 l/min	100 bar

water flow rate at  $+20^{\circ}$ C, 1 bar pressure at the valve inlet, free discharge. air flow [I/min]  $\approx 13.4 \cdot \text{Ky} \cdot \text{P}_{\text{loput}}$ , if  $\text{P}_{\text{output}} < \frac{P_{\text{input}}}{2}$  (Pinput and  $\text{P}_{\text{output}}$  are absolute values in bar.)



#### **Ball shut-off valves** PN 40

Materials: Housing: Hot-pressed brass, handle: Plastic, seal: NBR, valve seat with metal sealing Temperature range: -30°C to max. +110°C

Type <b>angle</b>	Old order number	Type straight	Thread DN
ASVW 18	ECK 18	ASVG 18	G 1/8" 4.0
ASVW 14	ECK 14	ASVG 14	G 1/4" 5.5
ASVW 38	ECK 38	ASVG 38	G 3/8" 8.0
		ASVG 12	G 1/2" 11.0







HYDAC Pipe clamps from page 244



Flow indicators and meters from page 395

PN 18

 $\star\star\star\star\star$  up to 400 bar

All data are considered to be unbinding reference values. We accept no liability for data selection that is not confirmed in writing. Pressure data refer, if not otherwise indicated, to liquids of Group II at +20°C